

IN THE SPECIFICATION:

Please amend the paragraph starting at page 1, line 6, and ending at line 8,
as follows:

--The present invention relates to an optical deflector that deflects an
incident light, a method of producing the same, and an optical device using the same.--

Please amend the paragraph starting at page 6, line 6, and ending at line 17,
as follows:

--In the second conventional example, to activate the reflective mirror 2007
with a large angle of deflection, the projection 2009b of the mirror-side comb section and
the electrode-side comb section 2012 are required to have a sufficient height in order to
avoid interference between the reflective mirror 2007 and the base 2002. Thus, there is a
problem that the moment of inertia of the reflective mirror 2007 inevitably increases as the
angle of deflection increases, and it is difficult to provide both driving characteristics of
high speed and a large ~~large~~ angle of deflection.--

Please amend the paragraph starting at page 6, line 18, and ending at line 25,
as follows:

--In addition, in the second conventional example, since an electrostatic
actuator requires a higher voltage than an electromagnetic actuator, the power supply unit
inevitably has a large size. Thus, there is a problem that, even if the optical deflector can

be reduced in size, the driving unit still has a large size, and the size of the whole device is also still large.--

Please amend the paragraph starting at page 7, line 3, and ending at line 10, as follows:

--It is, therefore, an object of the present invention to provide an optical deflector that can be driven at a high speed with a low voltage, provides a large angle of deflection and a low distortion even in high speed operation, and has a high static flatness of a reflective surface and a small size. Another object of the present invention is, size, a method of producing the optical deflector and an optical device using the optical deflector.--

Please amend the paragraph starting at page 7, line 21, and ending at line 25, as follows:

--magnetism ~~a magnetism~~ generating means provided in the vicinity of and spaced apart from the magnetic material, for driving the movable plate relative to the supporting substrate to deflect a light incident on the reflective surface,

Please amend the paragraph starting at page 15, line 17, and ending at page 16, line 4, as follows:

--Thus, according to this embodiment, the movable plate 6 is reduced in weight and the moment of inertia about the torsion axis C is also reduced, as compared to

the case where the movable plate is a simple rectangular-parallelepiped member without any recess. In particular, the moment of inertia of the movable plate 6 is determined by the total sum of the products of the masses of the fractional parts of the movable plate 6 and the squares of the distances of the respective parts from the torsion axis C. Therefore, provision of the recesses 5 in the movable plate 6 as shown in FIG. 3, which results in a ~~less~~ less of a weight of silicon at an increasing distance from the torsion axis C, can effectively reduce the moment of inertia thereof.--

Please amend the paragraph starting at page 19, line 6, and ending at line 20, as follows:

--In FIG. 1, the reflective surface 4 serves as an optical deflector element. However, if the reflective surface 4 is replaced with a reflective diffraction grating, an the optical deflector that is operated in the same manner by torsional vibration of the movable plate 6 can be provided. In this case, deflection of the incident light provides diffracted light. Therefore, a plurality of deflected light beams can be derived from one incident light beam. In the embodiments described below, description will be made for the case where the reflective surface 4 is used as the optical deflector element. However, in all the embodiments described below, the reflective surface 4 can be replaced with the reflective diffraction grating.--

Please amend the paragraph starting at page 20, line 5, and ending at line 11, as follows:

--The difference between FIG. 4 and FIG. 1 is the configuration of the supporting substrate 2, the elastic supporting parts 3, the movable plate 6, the recess 5, 5 and the permanent magnet 7. These differences 7, ~~and these~~ will be described in the following section. Here, in FIG. 4, parts identical to those in FIG. 1 are assigned the same reference numerals.--

Please amend the paragraph starting at page 24, line 1, and ending at page 25, line 2, as follows:

--Then, as shown in FIG. 12D, anisotropic etching is performed by dipping the substrate for a desired time in an aqueous alkaline solution having significantly different erosion rates for crystal faces of single-crystal silicon (for example, an aqueous potassium hydroxide solution, an aqueous tetramethylammonium hydroxide solution, etc.), thereby forming the supporting substrate 2, the movable plate 6, the elastic supporting part 3 and the recess 5 which are shaped as shown in FIG. 12D. In the anisotropic etching, the etch rate is greater for the (100)-equivalent plane and smaller for the (111)-equivalent plane. Therefore, the silicon substrate 104 is etched from the front and back surfaces thereof, and due to the relation of the patterns of the mask layers 101 with the silicon crystal faces, the silicon substrate 104 can be precisely etched into a shape formed by the (100)-equivalent planes covered with the mask layers 101 and the (111)-equivalent planes. That is, by this alkaline anisotropic etching, the recess 5 constituted by the (111)-equivalent

planes is formed in the back surface of the movable plate 6, and the concave shape constituted by the (111)-equivalent planes is formed in the side faces thereof. At the same time, in this etching step, the elastic supporting parts 3 are ~~is~~ also worked in the form of an X-shaped polygon formed by the (100)- and (111)-equivalent planes (see FIG. 5C).--

Please amend the paragraph starting at page 26, line 24, and ending at page 27, line 2, as follows:

--The difference of FIG. 6 from FIG. 4 is the configuration of the recess 5 and the permanent magnet 7, and these will be described in particular in the following. Here, in FIG. 6, parts identical to those in FIG. 4 are assigned the same reference numerals.--

Please amend the paragraph starting at page 27, line 18, and ending at page 28, line 4, as follows:

--The recesses 5 and the permanent magnets 7 in this embodiment have the same effects as the recesses 5 and the permanent magnets 7 of the optical deflector 1 of the first embodiment. However, in the optical deflector 31 of this embodiment, since no recess 5 is formed in the vicinity of the torsion axis C, ~~reduction of~~ rigidity of the movable plate 6 due to formation of the recesses 5 can be further reduces. In addition, since all the recesses are filled with the permanent magnets 7, even if the movable plate 6 is thin and the recesses 5 can have only an insufficient depth, the magnet can be used in an increased amount and a high generating power can be obtained.--

Please amend the paragraph starting at page 29, line 9, and ending at line 14, as follows:

--The difference of FIG. 8 from FIG. 4 is the configuration of the recess 5 and the permanent magnet 7, and ~~these~~ this will be described in particular in the following. Here, in FIG. 8, parts identical to those in FIG. 4 are assigned the same reference numerals.--

Please amend the paragraph starting at page 30, line 3, and ending at line 8, as follows:

--However, in the optical deflector 41 of this embodiment, the permanent magnet 7 covers tops of the recess 5 to provide a hollow ~~much hollow~~. Thus, the rigidity of the movable plate 6 reduced by formation of the recesses 5 can be effectively compensated for with less of an amount of permanent magnet 7.--

Please amend the paragraph starting at page 31, line 13, and ending at line 18, as follows:

--The difference of FIG. 10 from FIG. 4 is the configuration of the recess 5 and the permanent magnet 7, and ~~these~~ this will be described in particular in the following. Here, in FIG. 10, parts identical to those in FIG. 4 are assigned the same reference numerals.--